STATEMENT OF BASIS (AI No. 100980)

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0116513** to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Cajun Crab, LLC
6022 Bayouside Drive
Chauvin, LA 70344

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Lisa Kemp

DATE PREPARED: July 8, 2009

1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. LPDES permits – LA0116513
LPDES permit effective date: February 1, 2004
LPDES permit expiration date: January 31, 2009
This permit was modified effective January 1, 2005 to reflect the transfer from Bayouside Drive Seafood, LLC to Cajun Crab, LLC.

C. Date Application Received: July 30, 2008; additional information received via telephone on July 8, 2009.

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - crab peeling facility

Cajun Crab is an existing crab peeling facility. Processes include washing, boiling, picking, packing, and shipping crabs. According to the application, approximately 6000 pounds of live crabs are processed daily. The facility operates year round. Sanitary wastewater is treated in sewage treatment plant with aeration.

B. FEE RATE
1. Fee Rating Facility Type: minor
2. Complexity Type: II (BPJ points to "0" as per administrative decision)
3. Wastewater Type: II
4. SIC code: 2092

C. LOCATION - 6022 Bayouside Drive, Chauvin, Terrebonne Parish
Latitude 29° 24' 19", Longitude 90° 36' 25"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type:	crab boiling and crab wash wastewater, and washdown water from process area
Treatment:	screen
Location:	at the point of discharge from the northernmost cooler room drain pripe prior to combining with other waters
Flow:	1400 GPD (from DMRs on file)
Discharge Route:	via pipe to Bayou Petit Caillou

Outfall 002

Discharge Type:	treated sanitary wastewater
Treatment:	sewage treatment unit with aeration
Location:	at the point of discharge from the sewage treatment plant, prior to combining with other waters
Flow:	120 GPD (from DMRs on file)
Discharge Route:	via pipe to Bayou Petit Caillou

4. RECEIVING WATERS

STREAM - Bayou Petit Caillou

BASIN AND SEGMENT - Terrebonne Basin, Segment 120504

DESIGNATED USES -
a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
e. oyster propagation

5. TMDL STATUS

Subsegment 120504, Bayou Petit Caillou - from LA-24 bridge to Boudreaux Canal (estuarine), is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 120504 was previously listed as impaired for organic enrichment/low dissolved oxygen (DO), pathogen indicators, and nutrients (Nitrate +Nitrite as N and Phosphorus), for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 120504:

Petit Caillou Watershed TMDL for Biochemical Oxygen Demanding Substances and Nutrients was finalized on April 15, 2008.

Organic enrichment/low dissolved oxygen (DO)

Cajun Crab, LLC (formerly Bayouside Drive Seafood, LLC) was not included in the TMDL study. Four permitted dischargers were located on the Petit Caillou waterbody. All four of these dischargers were included in the projection modeling. They were shown to have little impact on Petit Caillou and as such will remain at their same limits.

Margin of Safety (MOS) Use

The TMDL report states "In addition to the conservative measures, an explicit MOS of 20% was used for all loads to account for future growth, safety, model uncertainty and data inadequacies." A portion of the MOS for the BOD_5 parameter is proposed for use by Cajun Crab, LLC. Based on 6000 lbs of live crab processed daily and a treated sanitary wastewater estimated flow of 0.00012 million gallons per day (MGD), approximately 1 lb of BOD_5 should be discharged from this facility per day.

Calculations:

Outfall 001:

Calculations (Crab – 408.25 NSPS)

BOD: Mo. Avg. = (6,000 lbs/day) X (0.15 lbs/1000 lbs seafood) = 0.9 lbs/day

Outfall 002 - The monthly average limit was converted from mg/l to lbs/day:

BOD: Mo. Avg. = (30 mg/l) X (.00012 MGD) X (8.34) = 0.03 lbs/day

Summation:

BOD Monthly Average = (0.9 lbs/day) + (0.03 lbs/day) = 0.93 lbs/day

Nutrients

According to the report, "This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the declaratory ruling issued by Secretary Givens in response to the lawsuit regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La.App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from non-point sources in the watershed will also control and reduce the nutrient loading from those sources."

LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients in similar discharges where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a BOD_5 limitation. Compliance with

the BOD_5 limitation as the indicator parameter will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the effluent limitations of the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause in the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards. Dissolved oxygen will be controlled by the BOD_5 limit.

TMDLS for the Fecal Coliform Bacteria, Chlorides, Sulfates, Total Dissolved Solids, Sediment, Total Suspended Solids, and Turbidity for Selected Subsegments in the Terrebonne Basin was finalized on April 19, 2007.

Fecal Coliform Bacteria

Subsegment 120504 was listed as impaired for fecal coliform bacteria. According to the TMDL report, "For fecal coliform bacteria, LDEQ's policy is to set wastewater permit limits no higher than water quality criteria (i.e., criteria are met at end-of-pipe). As long as point source discharges of treated wastewater contain parameter levels at or below these permit limits, they should not be a cause of exceedances of the fecal coliform bacteria water quality criteria. Therefore, no change in permit limits is required." Standard fecal coliform limits have been included in the permit at Outfall 002 that will address the potential for further impairment of this waterbody.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

Changes from the previous permit:

Outfall 001

1. According to the application, the amount of crabs processed daily has increased to 6000 lbs/day. Therefore, mass loadings have been increased. See Rationale for loadings and calculations.

Outfall 002

1. Monthly Average limitations are now included for BOD_5, TSS, and Fecal Coliform in accordance with current guidance for similar discharges.
2. Weekly Average limitations for BOD_5, TSS, and Fecal Coliform are now Daily Maximum in accordance with current guidance for similar discharges.
3. Monitoring for Fecal Coliform has been increased to 1/quarter based on numerous excursions from effluent limitations. See Compliance History/Comments.

Other:

1. Best Management Practices (BMP) to control solids in the effluent have been added to Other Conditions of the permit.
2. Best Management Practices (BMP) for dock washdown wastewaters have been added to Other Conditions of the permit.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC – There are no open, appealed, or pending OEC enforcement actions as of July 1, 2009

B. Inspection – According to TEMPO, an inspection performed at this facility on January 23, 2007 showed no areas of concern.

C. DMR Review/Excursions – DMRs were reviewed for the period March, 2007 through March, 2009. All DMRs were on file. The following excursions were noted:

Date	Parameter	Outfall	Reported Value	Permit Limits
Dec., 2008	Fecal Coliform	002	1070 col/100ml	43 col/100ml
June, 2008	Fecal Coliform	002	>6,000 col/100ml	43 col/100ml
Dec., 2007	Fecal Coliform	002	2,200 col/100ml	43 col/100ml
	BOD5	002	56 mg/L	45 mg/L
	BOD5	001	0.782 lbs/day	0.45 lbs/day
Aug., 2007	BOD5	001	0.56 lbs/day	0.45 lbs/day
July, 2007	BOD5	001	0.666 lbs/day	0.45 lbs/day
June, 2007	BOD5	001	0.829 lbs/day	0.45 lbs/day
	Fecal Coliform	002	19,500 col/100ml	43 col/100ml

8. EXISTING EFFLUENT LIMITS

Outfall 001 – crab boiling and crab wash wastewater, washdown wastewater from process area

	Limitation		
	Monthly Avg	Daily Max	
Pollutant	lbs/day (unless stated)		**Frequency**
Flow (GPD)	Report	Report	1/month
BOD_5	0.45	0.9	1/month
TSS	1.35	2.7	1/month
Oil & Grease	0.19	0.39	1/month
pH, s.u.	6.0 (min)	9.0 (max)	1/month

Outfall 002 – sanitary wastewater

	Limitation		
	Monthly Avg	Weekly Average	
Pollutant	mg/L (unless stated)		**Frequency**
Flow (GPD)	Report	Report	1/ 6 months
BOD_5	---	45	1/ 6 months
TSS	---	45	1/ 6 months
Fecal Coliform colonies/100ml	---	43	1/ 6 months
pH, s.u.	6.0 (min)	9.0 (max)	1/ 6 months

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 120504 of the Terrebonne Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Cajun Crab

1. **Outfall 001** - crab boiling and crab wash wastewater, and washdown water from process area (estimated flow is 1400 gpd)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	lbs/day (unless stated)		
Flow (gpd)	Report	Report	
BOD_5	0.9	1.8	40 CFR 408.25
TSS	2.7	5.4	40 CFR 408.25
Oil and Grease	0.39	0.78	40 CFR 408.25
pH (standard units)	6.0 (min.)	9.0 (max.)	40 CFR 408.25

Treatment: screen at every drain

Monitoring Frequency: 1/ month

Limits Justification: New Source Performance Standards Guidelines based on 40 CFR 408.2, Subpart B (Conventional Blue Crab Processing). Date of promulgation of guidelines is June 26, 1974. The facility building is approximately 20 years old, but it was gutted and remodeled prior to the facility beginning operations.

Calculations (Crab – 408.25 NSPS)

BOD: Mo. Avg. = (6,000 lbs/day) X (0.15 lbs/1000 lbs seafood) = 0.9 lbs/day
Daily Max. = (6,000 lbs/day) X (0.30 lbs/1000 lbs seafood) = 1.8 lbs/day

TSS: Mo. Avg. = (6,000 lbs/day) X (0.45 lbs/1000 lbs seafood) = 2.7 lbs/day
Daily Max. = (6,000 lbs/day) X (0.90 lbs/1000 lbs seafood) = 5.4 lbs/day

Oil & Grease: Mo. Avg. = (6,000 lbs/day) X (0.065 lbs/1000 lbs seafood) = 0.39 lbs/day
Daily Max. = (6,000 lbs/day) X (0.13 lbs/1000 lbs seafood) = 0.78 lbs/day

2. **Outfall 002** – treated sanitary wastewater (estimated flow is 120 gpd)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	mg/L (unless stated)		
Flow (gpd)	Report	Report	
BOD_5	30	45	Similar discharges* (BPJ), LAG530000
TSS	30	45	Similar discharges* (BPJ), LAG530000
Fecal Coliform colonies/100ml	14	43	Similar discharges* (BPJ), LAG530000
pH, s.u.	6.0 (min)	9.0 (max)	Similar discharges* (BPJ), LAG530000

Treatment: sewage treatment unit with aeration

Monitoring Frequency: 1/quarter for Fecal Coliform, 1/6 months for all other parameters at the point of discharge from the STP prior to mixing with other waters.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other industrial facilities and the Class I Sanitary Discharge General Permit, LAG530000 effective November 1, 2007. This facility discharges to an oyster propagation area; therefore, the Fecal Coliform limit is 14 colonies/100 ml monthly average and 43 colonies/100 ml daily maximum. The monitoring frequency for Fecal Coliform has been increased from 1/6 months to 1/quarter based on excursions from permit limitations.

* Existing permits for similar outfalls

BPJ	Best Professional Judgement
su	Standard Units

NOTE
For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2092 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).